USDA
NATURAL RESOURCES
CONSERVATION SERVICE
MARYLAND
CONSERVATION
PRACTICE STANDARD

FIELD BORDER

CODE 386
(Reported in Feet)

DEFINITION

A strip of perennial vegetation established at the edge of a field.

PURPOSES

This practice may be applied for one or more of the following purposes:

1. To reduce soil erosion;
2. To protect field edges that are used as travel lanes and turn rows;
3. To create or enhance wildlife habitat;
4. To reduce competition from adjacent woodland on agricultural fields.

CONDITIONS WHERE PRACTICE APPLIES

This practice may be applied at the edges of agricultural fields and other open areas, including land entered into conservation programs sponsored by USDA or other government agencies and private organizations.

This practice does not apply to plantings that are intended to function primarily as filter strips or riparian buffers, for which other standards are applicable. (Refer to the conservation practice standards for Filter Strip, Code 393; and Riparian Forest Buffer, Code 391.)

CONSIDERATIONS

Consider the long-term land use objectives of the client. For example, if the land user is interested in using the field border to provide wildlife habitat or additional forage production, consider the plant species that may be suitable for these uses.

Assess site conditions including surrounding land uses, soils, residual herbicides (to the extent known), available moisture during the growing season, and existing vegetation on the site and in adjacent areas, including any noxious weeds which may be present.

Select plant species that are native, or are introduced and are non-invasive, and have multiple values such as those suited for nesting habitat, fruit, seeds, browse, aesthetics and tolerance to locally used herbicides.

Avoid plant species that may be alternate hosts to undesirable pests or that may be considered invasive or undesirable. Species diversity should be encouraged in order to minimize problems due to species-specific pests.

Consider the adverse impacts of high populations of nuisance wildlife, such as deer and groundhogs, on the establishment and maintenance of vegetation. When feasible, select plant species that are not preferred foods of the nuisance animals, and utilize methods for protecting the plants until they become well established.

Also consider the potential for attracting nuisance wildlife into an area, either intentionally or unintentionally. Plantings that contain preferred wildlife foods may be used to attract nuisance wildlife away from valuable agricultural crops or ornamental plantings, but may also result in attracting additional nuisance wildlife into an area.

Take note of other constraints such as economic feasibility, access, regulatory or program requirements, the need for permits or approvals, and visual aspects.

Consider long-term maintenance requirements of the established vegetation.

Conservation practice standards are reviewed periodically, and updated if needed. To obtain the current version of this standard, contact the Natural Resources Conservation Service.

Refer to the Maryland Wildlife Biology and Management Handbook for additional habitat considerations for upland wildlife species.

CRITERIA

Criteria Applicable to All Purposes

Field borders shall be a minimum of 10 feet wide, and shall consist of perennial herbaceous and/or shrub species.

Establishment of vegetation by planting is the preferred method for creating field borders. Plantings shall consist of two or more species to provide greater vegetative diversity. Plant species shall be selected based on the proposed uses of the field border, preferences of the land user, and conditions of the site. Plant growth rates, shade tolerance, soil moisture requirements, and other plant characteristics shall be considered when selecting species. Use of locally native plant species shall be encouraged.

Site preparation and planting to establish vegetative cover shall be done at a time and manner to insure survival and growth of selected species. Supplemental moisture shall be applied if needed to assure early survival and establishment of selected species.

Only viable, high quality seed and planting stock shall be used. The method of planting shall include hand or machine planting techniques, suited to achieving proper depths and placement for the selected plant species.

Natural regeneration may be an option for establishing vegetation on sites where seeds or rootstocks of desired species are present, and the natural plant community will provide sufficient cover for the intended use of the field border. Natural regeneration is not a suitable option if there are significant site limitations (e.g., highly erodible soils, steep slopes, noxious weeds or other invasive species, etc.) which will inhibit establishment of the desired plant community.

Livestock shall be controlled or excluded as necessary so that the vegetative cover can be established and maintained to meet its intended purpose.

Plant and animal pest species shall be controlled to the extent feasible to achieve and maintain the intended purpose of the vegetative cover. Noxious weeds shall be controlled as required by state law.

Note: Specific cost-sharing programs or other funding sources may impose criteria in addition to, or more restrictive than, those specified in this standard.

Additional Criteria for Travel Lanes and Turn Rows

Field borders that are intended to function primarily as travel lanes and turn rows shall be established wide enough to accommodate turning equipment for planting and harvesting. Generally, these activities require borders at least 20 feet wide.

Additional Criteria for Wildlife

Where wildlife habitat is identified as the primary purpose, border widths and plant species shall be selected to provide wildlife food and/or cover for the desired wildlife species. Use the following table as a general guide when determining field border widths to benefit wildlife:

Table 1. Selected field border widths and value for wildlife habitat.

Field Border Width (ft)	Value for Wildlife Habitat
10	Low
35	Moderate
50	High
100 or more	Optimum

SPECIFICATIONS

Plans and specifications for establishment of the field border shall be prepared in accordance with the previously listed criteria. Plans and specifications shall contain sufficient detail concerning site preparation and establishment to ensure successful installation of the practice. Documentation shall be in accordance with the section "Supporting Data and Documentation" in this standard.

For most sites and intended uses of the field border, herbaceous and/or shrub species shall be specified in accordance with the conservation practice standard for Conservation Cover, Code 327. Code 327 is appropriate for field borders that are primarily intended for wildlife habitat, or will be infrequently used as travel lanes or turn rows for farm equipment. If site conditions are favorable, natural regeneration may be specified, either alone or in combination with plantings.

When severe site conditions are present or anticipated, vegetation shall be selected from the conservation practice standard for Critical Area Planting, Code 342. Code 342 is best suited for critically eroding sites which cannot be stabilized by ordinary conservation treatment, or where field borders will be frequently used for travel lanes or turn rows.

Where existing woody vegetation will be cut back along a field edge to create a border area (sometimes referred to as a "cut-back border"), plans shall also specify which, if any, existing plant species shall be retained to provide wildlife food and cover.

Note: If cut-back borders will be used, take note of applicable regulatory constraints in Maryland concerning removal of existing woody vegetation. Laws pertaining to forest conservation, wetland protection, critical area protection, stream buffers, and erosion and sediment control may be applicable. Permits or approvals from federal, state, or local government agencies may be needed before any work is performed. Contact the county Soil Conservation District office for more information.

OPERATION AND MAINTENANCE

Job Sheet(s) or site specific management plans shall be developed and provided to the client to assure performance of the practice as intended. At a minimum, the following components shall be addressed:

Vegetation in the Field Border

Describe what inspections are required to determine whether the desired vegetation is present in suitable quantity, quality, and distribution to meet objectives of the project.

Describe the extent of management needed to maintain vegetation in the desired species composition or age class (if applicable), or no management required (e.g., natural area).

Nuisance Plants and Animals

Describe the extent to which plant and animal pest species, including noxious weeds, will need to be controlled.

Acceptable Uses

Describe the acceptable uses (e.g., grazing, hunting, nature preserve, etc.) and time of year/frequency of use restrictions, if any. Pay particular attention to cost-sharing program requirements as they relate to acceptable vs. restricted uses, and other management restrictions.

Frequency of Inspections

At a minimum, require annual inspections of the field border.

SUPPORTING DATA AND DOCUMENTATION

The following is a list of the minimum data and documentation to be recorded in the case file:

1. Field location, extent of the field border in length & width, and assistance notes. Also note the location of the planting on the conservation plan map;

2. Species selected for establishment, seeding/planting rates, and planting dates;

3. Completed copy of the appropriate Job Sheet(s) or other specifications, and management plans.

REFERENCES

1. Brown, Melvin L. and Russell G. Brown, 1984. Herbaceous Plants of Maryland. University of Maryland, Port City Press, Baltimore.

2. Brown, Russell G. and Melvin L. Brown, 1972. Woody Plants of Maryland. University of Maryland, Port City Press, Baltimore.

3. Fish and Wildlife Service, Chesapeake Bay Field Office with the Natural Science Center and Adkins Arboretum, 1995. Native Plants for Wildlife Habitat. Annapolis, MD.

4. Natural Resources Conservation Service, Conservation Practice Standard for Conservation Cover (Code 327).

5. Natural Resources Conservation Service, Conservation Practice Standard for Critical Area Planting (Code 342).

6. Natural Resources Conservation Service, Conservation Practice Standard for Filter Strip (Code 393).

7. Natural Resources Conservation Service, Conservation Practice Standard for Riparian Forest Buffer (Code 391).

8. Natural Resources Conservation Service, Maryland Wildlife Biology and Management Handbook.